

zoölogists who talk of "animal biology," and manifest at the same time a peculiar facility for dropping the modifying adjective noun. So we hear of "biology"—and that means echinoderms and whales and salpa-chains and the embryology of the guinea-pig. It occasionally means the fibro-vascular bundle of *Pteris*, but this poor, lonely *Pteris* comes in timidly and in great confusion, amid the eccentric hydroids and cetaceans. I have had students observe to me with winning confidence that they have "had" botany, but "biology,"—that is mystery still. Men are sent out from the university referred to in the GAZETTE editorial, and from other American institutions, who are totally devoid of any botanical training and totally pervaded with an uncontrollable yearning to label their zoölogical courses with the word "biology." I notice in the introduction of Dr. D. H. Campbell's very excellent little text-book on structural and systematic botany, lately from the press, the following clear definition of the term biology: "The science that treats of living things irrespective of the distinction between plant and animal is called 'Biology.'" That is the generally accepted meaning of the word, and it is as exhilarating to observe zoölogists attempting to preëempt the whole field with calm unphilological assumption as it would be to hear an electrician call his science "engineering" or a Greek instructor talk of "language study," meaning thereby the accentuation of Homer or Thucydides. Doubtless this uncritical use of terminology is fostered by the uncritical study of biology which obtains whenever the great coördinate branch of botany is lopped off and thrown in the fire as a preliminary. Possibly, too, it is due to diffidence and possibly to sheer ignorance. But principally, I am inclined to think, it is the child of shrinking one-sidedness, the progeny of ill-balanced courses of study and of past iniquity in methods of zoölogical instruction which makes the very word "zoölogy" distasteful to the teacher of to-day.

OPEN LETTERS.

Rattlesnake antidote.

"Important if true" is a motto often illustrated in botanical research. This very week a gentleman has died in our vicinity who was bitten by a rattlesnake—died though he had the nerve to amputate his own finger with his jack knife on the field.

A clergyman of this region, the Rev. Mr. Clark, who has been in the state since the early history of it as a territory, has for two years been calling my attention to a weed by which he claims to have saved several lives. He claims it to be a safe and sure cure for rattlesnake bite. This week I have at last succeeded in getting from him the plant in bloom, and it proves to be *Hieracium Scouleri* Hook. He is very anxious that I should publish the plant and the method of use. The plant is taken up whole and fresh, though he believes it can be made into a druggist preparation by pulverized powders, or a decoction, or an extract. The plant

in its fresh state is bruised and mashed, and then gently steeped in milk. This after straining is to be drunk in large quantities until the patient has fully recovered. Mr. Clark affirms that he has successfully treated several patients by this method and has never yet lost a case. He is an intelligent minister in regular standing and active service of the Methodist Episcopal Church South, and in early days when physicians were scarce, did considerable practice of medicine. He is thoroughly positive and candid in his belief of the efficacy of this *Hieracium* as a cure for rattlesnake poison. Not being a botanist he did not know the name of the weed, and until to-day I have been unable to say what the weed is. But to-day he succeeded in getting the plant in bloom. Rev. Clark reports the plant very abundant, but my own botanical excursions have not taken me where it can be called abundant. In Coulter's manual it is reported "From Montana to Oregon and south to the Wahsatch."

It is a well known fact that deer and antelope and other animals when bitten by rattlesnakes seek relief in eating some weed well known by hunters in early days, and Rev. Clark believes this plant to be the one.

By turning to Gray's Flora of North America (Gamopetalæ) one will see *Hieracium venosum* L. called "Rattlesnake weed." This popular name must have a history behind it, and being of the same genus of our Rocky Mountain rattlesnake weed it seems to point to the same use among the early comers to the Atlantic coast. On telling this account of Rev. Clark to a prominent physician to my surprise he did not scout and ridicule the tale, but expressed himself as interested in it and deemed the remedy as possible and probable.

Helena, Montana.

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CURRENT LITERATURE.

Australian Algæ.¹

Among the various contributions to the geographical distribution of the Fresh-water Algæ, which have been given by the author, this work ranks as the most complete and comprehensive in regard to the Australian Flora. The work is based upon a collection made by Dr. Berggren during his stay in that country during the years 1874 and 1875.

After giving an account of the papers hitherto published upon this subject, the author enumerates about 300 species (with exclusion of the Diatoms), of which 26 have been described as new to the science, besides several new varieties and subspecies.

In regard to the geographical distribution of the species in other countries, the author does not think it needful to give any comparison, since the occurrence of these Algæ in the extra-European countries is almost unknown. He mentions, however, that he has not observed any new genus, or any genus not represented in Europe, except the genus *Phymatodocis*, which occurs in America and Australia. The collector of this highly valuable material has added the following remarks upon the general occurrence of these Algæ in New Zealand: "The Fresh-

¹ OTTO NORSTEDT.—*Fresh-water Algæ, collected by Dr. S. Berggren in New Zealand and Australia*, with seven plates. (Extract from Kongl. Svenska Vetensk. Akad. Hdglgr. Vol. XXI), Stockholm, 1888.